CLAIMS:

1. A transmitter for transmitting RF data in an RF communication network using a plurality of carrier frequencies, the transmitter comprising:

a data splitter for receiving an information signal at an intermediate frequency lower than the carrier frequency; and

two transmitter paths each having an input connected to the data splitter and each having a frequency modulator for upconverting the intermediate frequency to a respective carrier frequency, the carrier frequency being individually selectable for each transmitter path.

2. A transmitter according to claim 1, wherein each transmitter path includes preset attenuation means located to attenuate the upconverted information signal prior to transmission.

3. A transmitter according to claim 1 or 2, wherein each transmitter path includes an amplifier located to amplify the upconverted, optionally attenuated, information signal prior to transmission.

4. A transmitter according to claim 1, 2 or 3, wherein each transmitter path includes adjustable attenuation means for attenuating the upconverted information signal prior to transmission.

5. A transmitter according to any preceding claim which comprises a power combiner, each transmitter path having an output connected to the power combiner.

6. A transmitter according to claim 4, which comprises power control means for controlling the adjustable attenuation means.

7. A transmitter according to any preceding claim, wherein each frequency modulator comprises a frequency generator and a signal mixer.

8. A transmitter according to any preceding claim, wherein the RF data is transmitted as a sequence of time slots, the data splitter being controllable to supply the information signal of one time slot on one of the transmitter paths, and the information signal of a subsequent time slot on a subsequent transmitter path.